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2007-2009 Strategic Plan

May 2006

Washington State Department of
Information Services

Moving Washington's Information Technology

Forward

Department of Information Services
2007-09 Strategic Plan
May 2006

INTRODUCTION

Governor Gregoire and her administration are committed to moving Washington forward – delivering leadership and services that help Washington citizens achieve an outstanding quality of life and compete effectively in the global economy of the 21st century. Technology and leadership provided by the Department of Information Services (DIS) enables governments and schools to deliver outstanding services that move Washington forward. Imagine how information technology could be working for Washington citizens, businesses, and communities in the not-too-distant future:

> *Martha Davis is a young accountant at a growing specialty agricultural business located in an eastern Washington town. She is also earning credits toward a Master of Business Administration degree through a distance-learning program delivered over the state's K-20 Educational Telecommunications Network.*
>
> *At work, the state's Internet Business Portal helps her to efficiently take care of the company's tax filing and other reporting responsibilities.*
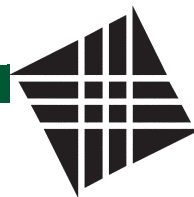>
> *Her employer is achieving 20% annual export growth that is driving the need to expand operations. To find talented prospective workers it screens resumés submitted by financial, marketing, and sales professionals all over the nation who are using the state's Access Washington™ Web portal to explore job opportunities in the Evergreen State.*
>
> *Business growth has also created a need for an additional processing facility. As the company develops its plans, the state, local, and federal government agencies involved in the expansion effort quickly form a project team using videoconferencing, webcasting and other information sharing technologies. They are able to meet frequently with each other and with Martha's company using these digital technologies. Their collaborative work ensures that the firm's growth and the public's development requirements are both satisfied through a coherent and efficient process.*

In this scenario Martha Davis and her company are moving forward – growing their resources, competing in the global economy, creating jobs, and building their local community. Some of the technology in this scenario has already been developed by DIS. The K-20 Education Network has been serving the state since 1999. The Access Washington Web portal receives more than 2 million visits per year, and many already use the site to explore employment opportunities. The Washington Internet Business Portal is under development. Other technology in this story can be implemented in the next few years to help improve the services that government delivers.

In the past two decades we have witnessed a revolution in the use of information technology in American society and institutions. DIS has led the way in Washington through such accomplishments as creating statewide data networks, helping government agencies offer services over the Internet, developing the state's Access Washington central Internet portal, and constructing mainframe and server-based data centers. DIS has been at the heart of change in government for 20 years, and we are excited about the opportunity to keep moving Washington forward in the 21st century.

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EXECUTIVE SUMMARY

This document is the 2007-2009 strategic plan for the Washington State Department of Information Services (DIS). DIS, led by Washington's Chief Information Officer, provides technology leadership and services for government organizations across the state. A cabinet-level agency for two decades, DIS delivers information technology leadership, policies, and service choices for a variety of customer groups. These groups include state and local government agencies, education institutions, tribal governments, and qualifying non-profit organizations.

This plan is organized according to the agency's formal goals, which have been developed by combining input from the agency's key stakeholders – Governor Gregoire, the Legislature, the state Information Services Board, customers, and DIS employees. These goals directly support Washington's Priorities of Government Result Area 10, to improve the ability of state government to operate efficiently and effectively. The goals are to:

- Provide innovative technology leadership
- Provide quality, reliable, cost-effective, enterprise-based IT services
- Implement successful DIS and state IT projects and infrastructure
- Promote a valued and satisfied workforce
- Ensure financial stability
- Provide quality and reliable internal support services

DIS will provide innovative leadership by leading cross-agency initiatives and developing new enterprise-based services that address customer business needs and technological innovation. Future planned initiatives include expanding the state capitol campus fiber network, ensuring that critical state information technology systems continue to operate in times of emergency, providing telephone service over data networks, increasing data network security, and achieving additional cost savings through the state's SmartBuying program.

DIS is now jointly accountable for the success of major state computer system implementations, along with the agencies that develop the systems. Key strategies for ensuring success include building closer relationships with partner agencies, promoting IT project management expertise, and improving project estimates.

An integrated facility for the statewide data center and agency staff represents a fundamental strategic initiative. The current data center facility was targeted for replacement as early as 1991, and is not equipped to support efficient, effective enterprise services into the future. The current dispersion of agency staff among eight different locations undermines the agency's ability to manage the increasing convergence of different technologies, as well as harness that convergence to address the business needs of our customers and the citizens they serve. Public services increasingly depend on information technology to improve efficiency and effectiveness, and an integrated facility is a key element for ensuring IT fulfills its public service potential in coming decades.

SOURCES FOR THIS PLAN

Many sources contributed to this plan's content and the strategic direction it represents.

- Governor Gregoire has given the department clear direction to prioritize critical outcomes including providing quality and reliable services, ensuring the success of major state information technology projects, and providing technological leadership benefiting state and local governments and the citizens they represent. Through Executive Order 2005-02, she has also directed DIS to provide technology support for her Government Management, Accountability, and Performance (GMAP) initiative.

- The Washington Legislature has defined the purpose and expectations of the agency. The Legislature's Joint Legislative Audit and Review Committee (JLARC) recently completed an assessment of the funding process for major information technology projects, the conclusions of which help shape the strategy relating to those implementations.

- The Information Services Board (ISB) provides policy and strategic direction for the DIS Management and Oversight of Strategic Technologies Division (MOSTD) and the state.

- The Office of Financial Management, through its Priorities of Government budgeting process, has called upon DIS and other agencies to further the goals of efficient and effective government.

- DIS customers have provided invaluable input through their participation in a formal customer survey, and in various IT service and policy groups. The customer survey was conducted in the fall of 2005 by The Gilmore Research Group. The service and policy groups include the Customer Advisory Board, Enterprise Architecture Committee, Washington Computer Incident Response Center, and Geographic Information Council.

- DIS employees have participated in strategic planning working groups and provided information and feedback during the plan's development. They have made fundamental contributions to the agency's revised mission, vision, and goal statements as well as its more specific business strategies.

DIS thanks all these parties for their attention, direction, and contributions to our work and future success.

MISSION, VISION, AND CORE VALUE STATEMENTS

Mission

To deliver quality information technology products and services to customers through proactive and timely technology leadership.

Vision

DIS is the trusted technology leader.

Core Values

We are committed to the highest standards of ethics and integrity.

Innovation is our tool of choice for addressing change and meeting customer needs.

Our employees are our most valued assets and their well-being is crucial to our success.

We are customer driven and committed to providing world-class customer service.

PRIORITIES OF GOVERNMENT (POG) AND GOVERNMENT MANAGEMENT, ACCOUNTABILITY, AND PERFORMANCE (GMAP) PROGRAMS

The Department of Information Services, like all Washington state agencies, operates within a management framework that focuses on achieving the key results that citizens most expect from their state government. Two fundamental components of this framework are:

- The Priorities of Government initiative which identifies ten results that state government must deliver; and,
- The Government Management, Accountability, and Performance management system, which agencies use to routinely assess programs and ensure they are delivering and improving results.

The goals and programs described in this strategic plan most directly accomplish the Priorities of Government's Statewide Result 10, to "improve the ability of state government to achieve results efficiently and effectively":

- Quality and reliable IT services improve the ability of government to provide effective services to citizens, even in times of emergency.
- Cost-effective and enterprise-based IT services promote economies of scale and government efficiency not only in the initial cost of the technology, but in the ongoing maintenance, administration, and training associated with the services. "Enterprise-based" means common, shared services that are available to the set of agencies within state government, and to our other sets of customers where possible.
- Innovative technology leadership helps other state agencies take advantage of new technology to provide more efficient, effective public services.
- Successful state information technology projects ensure efficient outcomes in these high-cost, high-risk undertakings.

By providing the K-20 Education Network, DIS also makes a substantial contribution to POG Result Areas 1 and 2, to "improve student achievement in elementary, middle, and high schools" and "improve the value of postsecondary learning." The K-20 network is a high-speed telecommunications network that provides Internet and live two-way videoconferencing in Washington's public educational systems. Indirectly, DIS supports the other POG Result Areas by supplying information technology services to agencies that have primary service responsibilities in those areas.

DIS uses the GMAP program to monitor, improve and report its performance results. Many of the performance measures listed in this plan are used within the GMAP program to monitor and assess contributions toward the statewide POG goals.

DIS GOALS, OBJECTIVES, STRATEGIES, ACTIVITIES, AND MEASURES

Goal: Provide innovative technology leadership

The state of Washington has been repeatedly recognized for its innovation and leadership in the use of information technology for government services. DIS has been an instrumental leader and partner in this success. Recent examples include:

- Access Washington™ state government Internet portal, providing state information to the public
- Digital security gateways, allowing secure online public services
- E-permits, enabling efficient online government services
- One-stop business licensing
- AMBER alert Web portal, notifying thousands of people when a child abduction occurs, improving law enforcement's efforts to recover an abducted child
- K-20 Education Network, a high-speed telecommunications network for Washington's education systems
- Blackberry mobile services, providing state government with wireless access to e-mail and other business information

As we continue to lead, DIS will place a stronger emphasis on providing enterprise-based services to support the innovations developed between DIS and our partner agencies. Enterprise-based services are common, shared services designed for use by the entire range of state government agencies, and to our other sets of customers where possible. These services will ensure that the benefits of innovation are combined with economies of scale to provide efficiencies to state government as a whole. Delivering this value and efficiency requires carefully choosing the right combinations of services and timing. This in turn means DIS must fully understand customer business and technology needs, the trends and markets for technology products, and then develop enterprise services accordingly. Ensuring DIS has sufficient internal capacity to properly plan and develop these services is a key factor for success. Therefore, we intend to increase capacity for this analysis and planning in the coming biennium.

Objectives

Address customer business needs by developing and introducing the right enterprise-based technology solutions at the right time.

Develop information technology policies and decision-making tools that lead to efficient, effective IT implementation throughout state government.

Strategies for meeting the Objectives

- Lead cross-agency initiatives to improve public services through innovative uses of information technology
- Proactively identify the technology needs of our customers and the state government enterprise, and develop enterprise-based services to meet them

- Work with the Information Services Board (ISB) to develop policies and programs that ensure effective, efficient, and secure use of information technology across the enterprise

Specific Activities

- The service operation divisions of DIS – the Telecommunications Services, Computer Services, and Interactive Technologies Divisions – provide ongoing leadership by:

    o   Assessing emerging customer business requirements
    o   Identifying opportunities for existing or new enterprise-based solutions to serve customer business needs
    o   Working with customers to develop new opportunities into efficient, effective services

Specific initiatives in the next two years include developing:

    o   A one-stop Internet Business Portal to make licensing, permitting, regulatory approvals or filings, and tax collection easier for the business community
    o   More security service options for customers
    o   State enterprise services using wireless technology
    o   Advanced collaboration services such as Web conferencing and video-conferencing
    o   Enhanced data integration services to facilitate cross-agency data use and enterprise technology systems
    o   State enterprise business continuity services that help customers continue to deliver their services in times of emergency
    o   More efficient records management

- The Enterprise Initiatives Group provides a collaborative forum for customers and DIS to develop innovative ways of delivering public services, and the information technology that supports those improvements.

- The K-20 Education Network is a high-speed telecommunications network that provides Internet and live two-way videoconferencing to Washington's public education systems. It also connects schools with one another. More than 475 education institutions and libraries throughout the state use the K-20 Network. DIS will lead the implementation of the K-20 Next Generation Education Network, which will offer increased and dynamic bandwidth to meet the future needs of all K-20 education sectors.

- The Justice Information Network Program improves public safety by providing criminal justice practitioners with complete, timely, and accurate information. The program is also responsible for improving the operating efficiency of the criminal justice system by facilitating the integration of disparate systems throughout the state.

The Information Services Board (ISB) adopts policies that ensure the effective, efficient, and secure use of information technology across the enterprise. Several DIS programs work with the ISB to promote this mission, including:

- Enterprise Architecture (EA), which promotes state information technology planning, investment, and design decisions that:
  o Are consistent, predictable, and timely
  o Align with business priorities and needs
  o Result in more citizen-friendly, integrated services
  o Promote a more efficient state IT infrastructure
  o Facilitate cross-organizational sharing of enterprise information
  o Recognize innovations and best practices from across the enterprise

DIS will continue to lead additional Enterprise Architecture initiatives throughout the 2007-09 Biennium.

- The State Interoperability Executive Committee (SIEC), which collaborates with other state agencies to develop more coordinated, effective emergency responder communications. This program works with the Information Services Board and partner agencies to improve public safety by coordinating, developing, managing, and promoting statewide interoperability policies and standards. The program is also responsible for improving and building essential links within public safety and public service communications systems to permit units from two or more entities to exchange information.

- Geographic Information Technology (GIT), which provides tools to develop analyses, planning, and solutions for a wide range of public issues. These include transportation systems, natural resource and wildlife management, emergency response, homeland security, economic development, and health and human services. The Washington State GIT Strategic Plan steers the state to an efficient, enterprise-wide approach for this technology, and to higher value data for users. The plan's three key strategies are to:

  o Develop a common vision and architecture for GIT deployment across state agencies
  o Leverage GIT investment through enhanced access to data and applications

o   Integrate state GIT activities with federal and local interests through enhanced collaboration and initiatives that cross jurisdictions

Proposed Performance Measures

- Number of new DIS enterprise services deployed
- Number of initiatives completed by the Enterprise Initiatives Group

Goal: Provide quality, reliable, cost-effective, enterprise-based IT services

The Legislature created DIS with a basic charge to provide technology services on a cost-recovery basis to state agencies, local governments, and public non-profit entities.

In the ensuing 20 years, DIS has developed and maintained a core set of stable, enterprise-based IT infrastructures and services. These systems are essential tools for keeping governments running and delivering public services to millions of citizens – around the clock, throughout the year, decade after decade. The critical nature of these services means these IT systems need to offer extremely high quality and reliability. DIS has therefore built high levels of redundancy, security, and disaster recovery capabilities into the technology infrastructure.

The DIS TechMall (http://techmall.dis.wa.gov) provides up-to-date, detailed information on all technology services offered by DIS.

Objectives

Increase efficiencies for the state enterprise by developing greater economies of scale in its IT services

Maintain high levels of service quality and reliability

Increase customer satisfaction with existing DIS service offerings

Strategies for meeting the Objectives

The efficiency proposition of DIS services involves creating greater economies of scale that will drive down IT costs for customers. The more agencies use a common provider, the more economical the service becomes for the state as a whole. Over time this allows customers to channel a greater share of resources to their core public service missions rather than to information technology infrastructures. Therefore, a fundamental DIS strategy is to expand the number of customer agencies using our service offerings. This means making wise technology choices and delivering high value products.

As use of the enterprise approach in state information technology increases, we will also retain and improve customers' satisfaction with service quality and reliability. DIS will continue to evaluate service performance through the Government Management, Accountability, and Performance initiative (GMAP). We will institute an improved enterprise change management program, which will minimize the impacts of necessary operational

changes by improving communications with our customers. DIS will also implement changes to its management, customer relations, and communications systems to put more focus on proactively addressing customers' technology and business needs.

Our internal disaster recovery and business continuity programs will continue to be developed so our customers can rely on the state's IT infrastructure to function when emergencies strike.

Specific Activities

Activity: DIS Data Network Services provides Internet connectivity for public sector customers, and the data networks such as the State government Network, the Capitol Campus Fiber Network, the K-20 Education Network, and the Intergovernmental network.

- **Data Network Services strategies:**
  o Continue implementation of Multi-Protocol Label Switching (MPLS) network technology for state agency customers. MPLS technology increases transmission capacity while allowing for greater security, more efficient network management, and voice, video, and data transfer over the same network.
  o After buildout of the MPLS network, DIS plans to again gather information from customers about their future networking needs. This information will be the basis for the next state data network implementation.
  o Expand the Capitol Campus Fiber Network to improve service to customer agencies in Tumwater and Lacey state facilities.

Activity: Mainframe Computing Services processes millions of business transactions each day for citizens and state agencies in the areas of social services, employment, corrections, licensing, business regulation, finance and retirement systems, health care, and natural resources. DIS operates modern, state-of-the-art mainframe computers that can provide much of the functionality of server-based technology, as well as additional benefits that are not as readily available with server technology.

- **Mainframe computing strategies:** Overall strategy for the mainframe involves developing advanced mainframe functions – and educating customers about them – while continuing to provide a high degree of quality and reliability in existing services.
  o Explore adding virtual server and server consolidation services
  o Promote an open standard mainframe environment
  o Improve security support and disaster recovery / business continuity functions
  o Refine software asset management to identify cost efficiencies that may be gained

Activity: Enterprise Storage provides data storage services for mainframe and server-

based technology. The need for data storage will continue to grow at a high rate as computer applications advance and the state develops more enterprise-based business practices.

- **Enterprise Storage strategies:**
  o Continue to offer disk, tape, and server backup services
  o Develop more advanced technologies such as Storage Area Networks and Network Attached Storage

Activity: Enterprise Business Solutions (EBS) provides server-based technology and services that can be shared by agencies across state and local governments. In keeping with the administration's direction to promote enterprise-based service provision, a major strategy for EBS will be to expand customer use of existing solutions and to develop new services that meet the common business needs of state agencies.

- **Enterprise Business Solutions strategies:**
  o Expand customer use of DIS hosted and dedicated server environments. DIS can house, in proper operating environments, servers that customers own and operate. DIS can also own and operate servers that host customer applications.
  o Business Continuity: Develop state business continuity operations that allow agency applications to continue after disasters occur.
  o Data: Develop new data integration services that enable additional state enterprise business applications. Some of these applications will be created as a result of the state's Roadmap for Financial and Administrative Systems.
  o Enterprise services: Establish new services that provide efficiencies and added value for customer agencies. Shared web hosting, staff collaboration tools, and e-mail archiving are three promising areas for such services.
  o Consolidation: Explore server consolidation technology.

Activity: Voice Telephony Services manages more than 50,000 local telephone lines and provides more than 150,000 individual users in public agencies with long distance telephone services. The group also offers conference calling services, directory assistance for state agencies and local governments all over Washington, and state directory assistance for citizens. The local telephone group within Voice Telephony Services provides technology and consulting support for other state agencies' customer call center operations. These operations serve millions of Washington citizens each year who call state agencies for assistance with their public services.

- Voice Telephony Services strategies:
  o Increase customers using state enterprise local telephone services
  o Expand use of Voice Over Internet Protocol (VoIP) voice services

o Enhance conference calling services to include Web collaboration in addition to current audio features
o Explore alternatives for providing increased customer service value and efficiencies in the state's call center operations
o Maintain quality and reliable SCAN long distance services at competitive rates

Activity: Technology Acquisition Services (TAS) enables customers to buy and lease IT equipment and software at low prices. Specific services include technology brokering, leasing, master contracts, and technology consulting. TAS manages the information technology component of the state's SmartBuying program. SmartBuying provides customers with less expensive technology by developing standards for state technology products and negotiating with vendors for low prices. Technology Acquisition Services also leads the Computers for Kids program, distributing surplus state computers to classrooms all over Washington.

● **Technology Acquisition Services strategies:**
o Expand the products and services available through information technology master contracts
o Increase the number of information technology products available through the state SmartBuying program
o Grow customer use of the computer leasing program, which provides agencies a disciplined approach for ensuring that employee computers have up-to-date technology
o Improve usability of the state's TechMall Web site (http://techmall.dis.wa.gov), which provides information about the range of services that DIS provides

Activity: Enterprise Security Services (ESS) protects data traffic on public networks, citizen transactions made through state online business systems, and state government staff's daily work. ESS coordinates the Washington Computer Incident Response Center (WACIRC), an inter-agency technical group focused on state information security.

● **Enterprise Security Services Strategies:**
o Provide managed firewall services for customers
o Improve network intrusion prevention services
o Simplify user experience by consolidating the state's secure Internet gateways
o Enable additional channels for secure remote access to customer networks and applications
o Improve collaboration with the state Emergency Operations Center
o Provide statewide security education and security consulting to DIS customers for use as they develop business applications

o Explore additional security services for users of the state's Intergovern-
mental Network (IGN)

Activity: Multimedia Production Services offers professional, broadcast-quality
programs that help customers get key messages out to public and internal audiences. The
Multimedia group creates and produces award-winning video, webcast, streaming media,
Web site, and satellite broadcast products.

- **Multimedia Production Services Strategies:**
  o Provide customers additional webcast, video production, and streaming
  media opportunities for public outreach, staff training, and agency commu-
  nication
  o Explore additional service offerings in webinar training and videoconfer-
  encing

Activity: Enterprise Active Directory (EAD) Services enable state employees to work
more efficiently as individuals and in groups. They also allow for economies of scale in
many IT management functions while still letting agencies tailor specific features to their
preference. Examples of EAD services include single sign-on capability to state computer
applications, centralized e-mail spam and virus filtering, network faxing, e-mail directories,
and mobile messaging.

- **Enterprise Active Directory strategies:**
  o Expand the number of agencies with employees who participate in the
  statewide Enterprise Active Directory
  o Increase the number of EAD services offered to customer agencies

Activity: Web Properties operates two enterprise Web sites for state government. Access
Washington serves as Washington's Internet portal for the public, receiving millions of visits
each year. Inside Washington serves as the state intranet portal, offering a wide range of
resources for state employees.

- Web Properties strategies:
  o Expand and improve web site usability and foreign language translation
  efforts to make state Web sites more user-friendly
  o Enhance around-the-clock help support for the Access Washington state
  Web portal
  o Expand use of the Ask George™ search tool that allows efficient, effective
  Web site searches

Proposed Performance Measures
- Customer online transactions for System 390 and Unisys platforms*
- Computer processing service units per customer revenue dollar*

- PBX telephone lines used by customer agencies*
- Intergovernmental Network (IGN) traffic (billions of bytes per month)*
- Technology Acquisition Services business (dollars)
- Visits to the Access Washington Web portal

Note: * identifies a performance measure currently reported to the Office of Financial Management.

Goal: Implement successful DIS and state IT projects and infrastructure

Under Governor Gregoire's administration, DIS has been charged with joint accountability for the success of the state's major information technology projects. While DIS staff have provided general oversight of these projects in the past, this new model of accountability is a significant new development. Our objective is that all systems developed within state agencies are implemented on time, on budget, and with the full scope of functions. Success will help ensure that IT projects continue to provide better business value for agencies and improved services for the public.

Since 2005, DIS has put in place several new methods to improve project outcomes. These include more rigorous project status reports, identifying project success factors that should be in place before implementations begin, and establishing operational teams to make certain the state infrastructure is supporting the technical needs of enterprise systems. DIS will continue to work with customers, the Information Services Board, and other central service agencies to develop improved methods to reach our objective.

Similarly, DIS must ensure that it successfully implements the common IT infrastructure built for statewide use.

Objectives

Implement major state IT projects on time, on budget, with full scope

Implement DIS projects on time, on budget, with full scope

Ensure small agencies have sufficient information technology resources to accomplish their business missions

Strategies for meeting the Objectives

Activity: Information Services Policy Development and Project Oversight.
DIS provides staff support to the Information Services Board, which is composed of representatives of all three branches of state government as well as private industry. Activities include development of statewide information technology policy, preparation of technical IT standards, oversight of major IT projects, and evaluation of technical merits of proposed projects.

The Project Oversight strategies below focus on the successful implementation of information technology projects. Discussion of state IT policies and standards is in the statewide information technology strategic plan.

Strategies:

- **Build closer partnerships with customer agencies:** Closer engagement with customers helps all parties. Closer partnerships can improve agency IT portfolio planning, project planning, project management expertise, contracting, and implementation.

- **Promote information technology project management expertise:** Project management expertise varies from agency to agency depending on the nature of business, funding levels, personnel, and IT project history. Often, an agency only attempts to implement a major project once every ten years – or more. Methods to build expertise will account for this variance and recognize that project management skills are developed both through training and experience. Centralized state project management resources may also be developed to support implementation of high-risk projects across the state.

- **Improve initial estimates of project costs, timelines, functions, and business value:** When projects are funded, decision-makers need reliable information regarding budget, schedule, and scope. Developing more complete information earlier in the project development process is an essential element for ultimate project success.

- **Continue to improve resources for tracking project status and identifying project risks:** In 2005, DIS created more rigorous criteria for evaluating project status and risk. We also identified project management techniques, based on industry research, that improve the ability to implement projects successfully. DIS will continue to develop these tools and design new ones to assist DIS and customer agency staff with project management.

- **Work with other state central service agencies to provide more customer-centric processes for systems development:** When an agency plans a new system, the state's development process and requirements should be clear. The agency should also know where to turn for assistance at any time during that process.

- **Expand the practice of creating cross-DIS teams to support IT system development:** In 2005, DIS for the first time created internal operations teams to support the implementation of three major state IT projects: the Department of Personnel's Human Resource Management System, the Department of Corrections' Offender Management Network Information system, and the Department of Social and Health Service's ProviderOne system. These teams help ensure project success, and we will continue to develop and improve this service model.

- **Establish DIS Project Management Office:** DIS will implement this internal office to provide a more rigorous system for developing the DIS infrastructure that customer agencies depend upon to deliver their services.

Activity: Small Agency Client Services provides small government clients with objective advice for effective information technology planning and investment decisions.

Strategy: Small Agency Client Services

- DIS will emphasize its support of small agencies in five areas: connecting to the State Government Network, promoting efficiency through co-location with other agencies, providing critical IT equipment and infrastructure, addressing emerging security needs, and facilitating connections to state enterprise systems. DIS will continue to work with its Small Agency Initiative Committee partners (the Office of Financial Management, Department of General Administration, and Department of Personnel), to serve small agencies and administer the small agency Technology Pool. As in the past, DIS will also support small agencies through consulting in the best practices for portfolio development, investment plans, and compliance requirements.

Proposed Performance Measures

- Percent of major state information technology projects completed on time, on budget, with full scope
- Percent of DIS technology projects completed on time, on budget, with full scope
- Number of small agencies connected to the State Government Network

Goal: Promote a valued and satisfied workforce

Valued and satisfied employees are the foundation for DIS' continued success. Our human resource and management systems make critical contributions to employee well-being, and they must work effectively to help DIS fulfill its role as the state enterprise's IT leader.

Objectives

DIS employees are satisfied with the work they do, the resources and support available to accomplish the work, and their career development

DIS recruits and retains an exceptional group of employees

Strategies for meeting the Objectives

- Provide timely, relevant training and mentoring resources for agency line and managerial staff
- Develop and sustain competitive compensation levels
- Develop a recruitment system that uses innovative methods to identify and

recruit prospective employees
- Work constructively with employee representative organizations to achieve the goals of DIS

Performance Measures
- Employee survey responses corresponding to statewide measures
- Staff retention
- Percent of recruitments completed within desired time frames
- DIS managers' satisfaction with recruiting outcomes

Goal: Ensure financial stability

To continue its leadership role as the state's technology provider, DIS must maintain its financial stability. DIS finances are supported in large part by revenues that come from customers' purchases of our services. We must therefore operate efficiently enough to compete with other service providers, ensure that revenues cover expenses, and maintain sufficient financial capacity to develop new services that meet customer business needs.

Financial stability is a standard that is now being applied to individual DIS service lines. In previous years, DIS recovered its costs in the aggregate, meaning that agency revenues as a whole met agency costs as a whole. In 2005, the Office of Financial Management began to work with DIS to have the revenues from each DIS service line recover the costs of each specific service. This shift has created additional accountability at the line service levels, and is requiring changes to several rates effective July 1, 2007.

Objectives
Attain cost-recoverability for all DIS services

Strategies for meeting the Objectives
- The DIS Customer Relations Management initiative uses a disciplined approach to identify and promote specific services that can meet the business needs of particular segments of customers
- Business Analysis: DIS has created a Chief Business Analyst staff position to take a more proactive approach to develop new enterprise service initiatives and ensure that existing services remain financially sound
- DIS will continue to use the Government Management, Accountability, and Performance (GMAP) approach to closely track agency finances and highlight areas needing management attention

Performance Measure
- Cost-recoverability at the agency level and at the component service levels

Goal: Provide quality and reliable internal support services

Internal support services include areas such as human resources, finance, training, legal affairs and contracting, information technology, and performance management. Any organization's success depends to a large degree upon effective, timely work in these areas. This is especially true for an agency where success depends on meeting the needs of customers who have discretion in their technology service choices.

State government is moving in the direction of a performance-based, enterprise approach to management. DIS is adopting a similar approach to providing its internal services.

Objectives

Provide quality and reliable support services that enable our internal customers to achieve their service outcome goals

Strategies for meeting the Objectives

- Deliver more effective communications to customer divisions regarding internal support services
- Deliver increased training and mentoring to customer divisions within DIS
- Create more centralized and consistent internal service provision while retaining a customer focus
- Use innovative technology channels to deliver internal services (for example, webcasting, videos and streaming media, and threaded discussions on Web sites)

Specific Activities

- Communications Services - Supports DIS in delivering proactive customer solutions by developing communications tools, training, and collateral materials that promote the benefits and advantages of DIS products and services to DIS customers (and to their customer chain). Communications Services also provides an employee communications program to share vital information that inspires and sustains quality work that meets the needs of our customers. Internal and external communications programs use traditional, online, and multimedia communications and events to reach, engage, and broaden DIS audiences.
- Employee Development Services – Strengthens the ability of DIS to provide technology leadership by assisting all DIS staff with meeting training needs, performance management and improvement initiatives, GMAP practices, and human resource development plans. Assists our customer agencies, boards, and commissions with implementing online learning initiatives in their organizations.
- Finance Services - Provides a complete range of accounting, budgeting, and financial analytical services for operating and administrative groups of DIS. This includes customer invoicing, accounts receivable, accounts payable,

payroll and leave accounting, general ledger, budget, and rate analysis.

- Human Resource Services – Delivers recruiting, retention, employee wellness, and other human resource services.
- Risk Management – Identifies and addresses areas of high risk to the agency.
- Business Technology Services – Develops, administers, and supports the corporate information technology systems of DIS.
- Legal and Contracts Services – Provides quality, reliable, consistent legal and contracting solutions to customers within DIS.
- Performance Management Services – Implements the Government Management, Accountability, and Performance initiative within DIS.

Performance Measures:
- Customer satisfaction measures as gathered through surveys
- Business process timeliness measures in areas such as human resource recruiting, information technology support, and business contract development
- Workload measures in all areas

ASSESSMENT OF EXTERNAL ENVIRONMENT

The following items represent a summary of key trends in the agency's external environment:

Public
Increasing expectations for:

- Convenience and access to government services
- Security of information
- Continuity of government services in the event of emergencies and disasters

Customers
The 2005 DIS customer survey identified several key expectations of DIS:

- Move enterprise technology initiatives forward
- Reliable systems and networks
- Proactive customer service and proactive solutions to customer technology and business needs
- Additional security and wireless services
- Integration of state data systems to address business needs
- Improve efficiencies, competitive pricing, transparency

Technology
- Increased convergence and interrelationships between different technologies such as data and voice networks, server and mainframe computing environments, security, Web technologies, telephones, personal computers, and mobile computing devices

- Rapidity of change
- Growth of server-based technology and mainframe versatility
- Increasing availability of high bandwidth
- Integration of data (information, video, audio) and digitalization of media
- Convergence of emergency-related communications
- Systems integration
- Continued growth of Internet-based technologies
- Growth in need for, and capacity of, digital storage
- Growth of business needs for mobile and wireless products
- Open source software

Government
- The state's Government Management, Accountability, and Performance initiative
- State personnel system reform
- Continued pressure on budgets at all levels of government
- Federal HIPAA compliance requirements on state agencies
- Federal Securities and Exchange Commission requirements on vendors
- Records management
- Federal Communications Commission regulations

ASSESSMENT OF INTERNAL CAPACITY AND FINANCIAL HEALTH

Human Resources
Like other state agencies, DIS faces a twin challenge with respect to its information technology workforce. First, IT workers continue to be in high demand across a range of industries, and recruitment of qualified candidates can be difficult because of public-sector compensation levels. Second, the need for highly qualified IT workers will increase because a high proportion of state workers will be eligible to retire within the next few years. These challenges require creative, sustained recruitment and retention strategies, and compensation packages that make public sector IT work an attractive option for the next generation of state IT workers.

The 2006 DIS employee survey showed that employees' overall satisfaction rated 3.8 on a scale of 1 to 5, where a score of 4 indicates employees are "usually" satisfied with their employment. The survey revealed frequent concerns about high workload and compensation issues.

Internal Technology
Although DIS provides large scale information technology systems to provide customers with IT services, it also needs internal IT systems to run its business. The most significant strategic need in terms of internal systems is for a modern customer service tracking system. Like other customer service organizations, DIS needs to be able to effectively manage customer issues and problems that arise in day-to-day operations, and to manage

the workload required to resolve those issues. With such a system DIS will be able to allocate resources more effectively - and better identify, resolve, and reduce operational problems. It is a fundamental requirement for efficiently implementing the Government Management, Accountability, and Performance program at DIS.

Financial Health

A few short years ago, the Department's financial situation provided little cause for concern. The state's Data Processing Revolving Account (Fund 419) contained resources for needed investments, and the agency's cash balance was able to accommodate fluctuations caused by routine revenues and expenditures.

Circumstances have changed since that time. When the current Administration assumed management of DIS, the agency's revenues were falling short of covering expenses. In the short-term the Fund 419 and cash balances were able to cover the shortfall, but the situation was unsustainable in the longer-term.

The Department responded with a combination of staffing reductions and service rate adjustments. In the spring and summer of 2005, the agency created plans to reduce agency management by a total of about 14 staff by July 2007. Some reductions went into place immediately, while others were planned to occur over the following year. In the fall of 2005 and winter of 2006, DIS reviewed its rates for various services to bring them more in line with the expenses required for each individual service. This lowered rates for some services (including mainframe computing and data storage) and raised them for others (such as data network security and the state's Access Washington Web portal).

Through this combination of actions, DIS has established improved financial health for the time being. Maintaining that health will require constant attention to the costs of service, customer needs, and capital management.

CAPITAL AND ENTERPRISE TECHNOLOGY NEEDS

Facilities

Facilities have represented a key challenge to DIS for most of its 20 years of existence. As far back as 1991, a management consulting study commissioned by the Information Services Board, the Dolan Report, concluded that DIS should acquire a new data center and integrated office facilities. In 2006, the DIS data center is still located in the basement of the state's Office Building Two (OB2), the same place as in 1991. And 440 staff are still dispersed across multiple facilities – currently eight, soon to be nine – in Olympia, West Olympia, Lacey, and Tumwater. Staff are also located at four other remote sites.

The need for a new facility is tightly linked to the state's past and current intentions for the role of DIS: to be the state's information technology leader and the enterprise provider of efficient, effective IT services. The current data center undercuts efficient and effective services because of its energy-consuming mechanical and electrical systems, floor layout

issues, security issues, and failure to meet up-to-date seismic building standards for data center operations. The facility limits the ability of the state to address its enterprise information technology needs for the coming decades.

The Dolan Report concluded that staff dispersion was a problem even in 1991, by complicating the agency's management, communications, and team-building. Those basic business problems still exist, but their effects are now more detrimental to state government because of technological advances. The technologies currently managed by DIS in its separate locations – data networks, voice networks, security, mainframe computers, servers, telephones, and Web-based technologies – have become intertwined and convergent. The ability to manage them efficiently, and to lead the development of next-generation services our customers need and expect, requires the highest levels of staff communications, teamwork, and management.

Even when technologies were separate in 1991 and the Internet was still in its infancy, staff dispersion was a serious issue for DIS. Now that technologies are converging, and the public is becoming increasingly reliant on technology to provide direct service delivery, an integrated facility is necessary for Washington to maintain its role as a leader in the use of information technology.

TECHNOLOGY FOR ENTERPRISE IT SERVICES

Significant technology capital investments are routinely required in order to provide state agencies and local governments with quality and reliable information technology services that enable them to provide outstanding public services directly to citizens. Major upcoming capital needs in support of the goals and strategies outlined in this plan include:

Expansion of the Capitol Campus Fiber Network. The state continues to develop major state government office centers, including agencies' headquarters, in the cities of Lacey and Tumwater. The Olympia Capitol Campus is served by a fiber data network that supports high-speed data transmission and can support advanced services such as videoconferencing and Web-based conferencing. Extending the fiber network to Lacey and Tumwater will ensure that the new development receives the network efficiency and effectiveness available to other Capitol Campus offices.

Data Network Monitoring Tools and Network Lab Upgrades to reduce problems on the state's data networks, and resolve them more efficiently when they do occur.

Quality of Service equipment to ensure that agencies can use advanced services over data networks, such as video and Voice over Internet Protocol phones, without degrading service quality.

Replacement of the DIS' IBM System 390 **Mainframe Computers** according to the equipment's normal replacement cycle. These computers run mission-critical service delivery applications for agencies such as the Department of Social and Health Services, Department of Labor and Industries, Employment Security Department, and Department of

Corrections.

Equipment to support **Enterprise Business Continuity Services**, which will restore mission-critical state business data in the event that an emergency compromises agencies' normal IT operations.

Hardware for **Enterprise E-mail Archive services**, creating more efficient records management

PERFORMANCE ASSESSMENT

Providing Innovative Technology Leadership

Enterprise Architecture (EA): In the past two years DIS has worked with the Information Services Board and partner agencies to initiate and expand the state's EA program. EA promotes state information technology decisions that align with business priorities and needs, result in more citizen-friendly, integrated services, promote a more efficient state IT infrastructure, and facilitate cross-organizational sharing of enterprise information. The program started work on architectures in the areas of Networking Standards, Voice over Internet Protocol, Integration Architecture, and Geographic Information Technology.

Data Networks: After working with customers for several years, DIS began to implement leading-edge data network technology in 2005 and 2006. The "Multi-Protocol Label Switching" (MPLS) technology increases data transmission capacity while allowing for greater security, more efficient network management, and voice, video, and data transfer over a single network.

Internet-based Telephone Services: In 2005 DIS first implemented telephone service over the internet, for the Office of the Attorney General. This leading-edge telephone technology, called Managed Internet Protocol Telephony, uses data networks to carry telephone conversations, and enables new telephone service efficiencies and features.

Blackberry Service: DIS has successfully implemented Blackberry mobile technology services on an enterprise basis.

PROVIDING QUALITY, RELIABLE, COST-EFFECTIVE, ENTERPRISE-BASED TECHNOLOGY SERVICES

2005 and 2006 brought several notable achievements in technology services.

Quality and Reliability:

Customer Views: The 2005 DIS Customer Survey, confirmed that over 75 percent of customers agreed that the terms and "quality" and "reliable" described DIS.

Mainframe computing services: Reliability is critically important to customers of DIS

mainframe computers, which process millions of transactions per year for services such as unemployment benefits and Medicaid payments. Average availability of the System 390 mainframe was 99.999% in fiscal year 2005. Unplanned shutdowns of this computer were reduced from an average of seven per year in 2002-2003 to four per year in 2004-2005.

Cost-effectiveness:

SmartBuying Program. In the first six months of the SmartBuying program, customers saved $2.2 million in their purchases of selected IT hardware and software. To make the savings possible, DIS led teams of agencies that decided on standard features for items such as personal computers, servers, and software packages. Vendors were then allowed to compete for state agencies' purchases of these items.

Customer Views: The 2005 DIS Customer Survey revealed that 71 percent of DIS customers agreed to varying extents with the statement "DIS provides good value for the cost of its services." 10 percent were neutral to the statement, 12 percent did not agree to varying extents, and 6 percent did not know or held no opinion.

Enterprise-based Services

Enterprise-based services are common, shared services designed to be used by the entire range of state government agencies, and by our other sets of customers where possible. Sharing common services across state government benefits the whole enterprise by creating lower costs and allowing customer agencies to focus resources on their core missions rather than information technology infrastructure.

In many areas, the state has accomplished a relatively high degree of shared enterprise IT services. These include long distance telephone, local telephone, data networks, mainframe computer, and the Enterprise Active Directory.

These accomplishments notwithstanding, there is still improvement to be made in the degree to which DIS services are adopted by agencies across state government. Even for local telephone, data network, mainframe computer, and Enterprise Active Directory, some agencies continue to take non-enterprise approaches to service provision. In other areas, there is less widespread adoption of enterprise services. These areas include server hosting, data storage, multimedia production (video production and webcasting), security, disaster recovery, secure file transfer, wireless services, and security gateways.

IMPLEMENTING SUCCESSFUL TECHNOLOGY PRODUCTS

In early 2006, Washington's new Human Resource Management System went live. This project represents the first enterprise-wide computer system to be implemented in over

twenty years. The Department of Personnel is the main sponsor of this system. DIS became a co-leader of the project in 2005.

STATE PERFORMANCE MEASURES

Formal assessment of the performance of DIS has traditionally occurred by measuring workload volume on key DIS systems. The trends of these volumes follow, for the two-year period ending March 2006:

Computer Processing Service Units per Customer Revenue Dollar

Increase of 17 percent in service units per revenue dollar. This increase is a result of computer processing units increasing over the time period, and revenue decreasing due to rate reductions.

Customer Online Transactions for Mainframe Computers (System 390 and Unisys)

Reduction of 14 percent in customer online transactions. This reduction is a result of several customer business systems being moved from mainframe computers to servers.

Local (PBX) telephone lines used by Customer Agencies

Increase of 7 percent in Local Telephone PBX lines. This service obtained additional customers for local telephone lines, and saw growth in lines for existing customers.

Technology Brokering Service Business, in Dollars

Reduction of 1 percent in dollar volume. The most significant factor in this reduction is that many large three-year software contracts were renewed near the beginning of this time period, and those contracts entail more spending early in the three-year cycle.

Intergovernmental Network Traffic, in billions of bytes per month

Increase of 80 percent in bytes per month.

RECOGNITION OF DIS SERVICES

DIS has received numerous awards in the last two years for various services:

Access Washington:

- **"Service Elite Award"** from Customer Relationship Management (CRM) Magazine, 2006, for Web Support Services
- **Webby Award Official Honoree**, 2006
- **"Best of Show"** and **"Distinguished Award"** in the Online Communication Competition (2004-05) of the Puget Sound Chapter of the Society for Technical Communication

Amber Alert 911 Web Portal:

- **"Industry Achievement Award for Outstanding Contribution to Digital Government"** from WSA (formerly the Washington Software Alliance), 2005 The AMBER Alert 911 Web Portal, a partner project between DIS and the Washington State Patrol was awarded the Industry Achievement Award for Outstanding Contribution to Digital Government
- **"Innovative Use of Technology Award"** from the National Association of State Chief Information Officers (NASCIO), 2005

Multimedia Services:

2005

- **Communicator Award of Distinction**
  AOC (Administrative Office of the Courts) – "Jury Duty in Washington State"
- **Communicator Award of Distinction**
  DOL (Department of Licensing) – AAMVA Conference Open"
- **Communicator Honorable Mention**
  DOL – "Your Interactive Services Future Is Wide Open"

2004

- **Videographer Award of Excellence**
  DIS – "Protect It! Information Technology Security Awareness"
- **Videographer Award of Distinction**
  DSHS (Department of Social and Health Services) – "Families for Kids PSA"
- **Communicator Award of Excellence**
  DIS – "Move your World"
- **Bronze Telly Award**
  DIS – "Protect It! Information Technology Security Awareness"

Small Agency Client Services

Finalist for Outstanding Contribution to Digital Government, WSA, 2004. The Small Agency Initiative, managed by the Department of Information Services, was chosen as a finalist for the Industry Achievement Award for Outstanding Contribution to Digital Government from WSA.

STATUTORY AUTHORITY

Purpose
The Department of Information Services (DIS) was formed through the consolidation of the data processing authority and the state's three independent data processing and

communications systems in 1987. DIS is a cabinet-level agency organized to provide leadership, policy, and service choices for the use of information technology within state and local governments. The legislative intent in creating DIS was to make government information and services more available, accessible, and affordable. The Legislature also created the Information Services Board (ISB) to provide coordinated planning and management of state information technology services. DIS provides staff support to the ISB. Chapter 43.105 RCW establishes the ISB structure and outlines the statutory authority of DIS.

Powers and duties granted to DIS

- To provide technology services on a cost-recovery basis to state agencies, local governments, and public benefit non-profit entities; these services are for discretionary rather than mandatory use by customer organizations
- To establish rate structures that recover the costs of providing services
- To establish and appoint members of a Customer Advisory Board to advise DIS on service related issues
- To perform work delegated by the ISB, including the review of agency portfolios, the review of agency investment plans, and implementation of statewide and inter-agency policies, standards, and guidelines
- To review and make recommendations on agencies' funding requests for technology projects and to monitor the progress of those projects after they receive funding
- To review and approve standards and common specifications for new or expanded telecommunications networks proposed by agencies, public post-secondary institutions, educational service districts, or statewide or regional providers of K-12 information technology services
- To collaborate with the ISB and agencies on the preparation of a statewide strategic technology plan
- To prepare, with direction from the ISB, a biennial state performance report on information technology that includes, at a minimum:
  - An assessment of progress made toward implementing the state strategic information technology plan
  - An analysis of the success or failure, feasibility, progress, costs, and timeliness of the implementation of major technology projects
  - Identification of the benefits, cost avoidance, and cost savings generated by major information technology projects
  - An inventory of state information services, equipment, and proprietary software

Information Services Board

The Information Services Board is the entity to which the Legislature has delegated IT acquisition, policy development, planning, and oversight authority for the agencies of the executive and judicial branches. Washington is committed to using technology to improve

information and service delivery; accordingly, IT policies are developed to guide the rapid changes. While the statutory responsibility for the acquisition and management of IT resources rests with agency heads, the ISB establishes policies that guide those activities. The ISB's 15 members are drawn from the executive, judicial, and legislative branches; the administrative sections of higher education; an agency headed by a statewide elected official other than the Governor; and the private sector. The Governor appoints eight of the members. Permanent voting members include the DIS Director.

Powers and duties granted to the Information Services Board

- To develop statewide or interagency technical policies, standards, and procedures
- To review and approve standards and common specifications for new or expanded telecommunications networks proposed by agencies, public post-secondary education institutions, educational service districts, or statewide or regional providers of K-12 information technology services and to assure the cost-effective development and incremental implementation of a statewide video telecommunications system to serve public schools, educational service districts, vocational-technical institutes, community colleges, colleges and universities, state and local government, and the general public through public affairs programming
- To purchase, lease, rent or otherwise acquire, dispose of and maintain equipment, proprietary software, and purchased services or to delegate to other agencies and institutions of state government, under appropriate standards, the authority to purchase, lease, rent or otherwise acquire, dispose of and maintain equipment, proprietary software, and purchased services
- To develop standards governing the acquisition and disposition of equipment and proprietary software, the acquisition of purchased services, and the confidentiality of computerized data

The Management and Oversight of Strategic Technologies Division (MOSTD) of DIS serves as staff to the Information Services Board, consulting with agencies in the management and oversight of technology acquisitions, projects and resources; developing IT-related policies and standards; and coordinating multi-agency and multi-jurisdictional initiatives. As staff to the ISB, MOSTD implements delegated board projects, researches and prepares state IT policies for the board's approval.